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ABSTRACT

This report contains excerpts from the proceedings of a month-long program of workshops, panel discussions, and other activities that involved legislators and representatives of the communications industry and that focused on the future of communications and information. The first section presents an edited summary of a panel discussion that addressed questions concerning two areas: the social impact to be expected over the next decade as a result of changes in information and communications technology, and the most important action Congress can take in the coming years to deal with the impacts of these changing technologies. The second section offers recommendations and commentary drawn from eight workshop discussion groups that dealt with the following topics: consumer services, sharing versus restricting information, the role of the media, intergovernmental information sharing, federal government policies and practices, private sector activities and services, international information exchange, and the impact of information technology. The third section contains a list of the participants in a "technology fair" and a schedule of the movies shown at the fair. The final section presents a transcript of a discussion entitled "Dialogue on America's Future" that involved both legislators and members of the communications community. (FL)

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INFORMATION AND COMMUNICATIONS
CONGRESSIONAL CLEARINGHOUSE ON THE FUTURE
CHAUTAUQUAS FOR CONGRESS
MARCH, 1979

The following provides edited summaries of the March 7 and March 28 sessions.

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Analyst in Information Sciences
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June 12, 1979

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
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TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

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INTRODUCTION

During 1979, the Congressional Clearinghouse on the Future has sponsored a comprehensive program of weekly seminars, Chautauquas for Congress, 1979, thereby providing a forum for discussion of some of the most critical issues to be faced by our Nation in the coming decades. Each month is devoted to a specific major area of identifiable concern and provides an opportunity to explore the emerging "worlds" of the future through a variety of formats.

The theme for the month of March was communications and information, which as stated by the Chairman of the Clearinghouse, Representative Albert Gore, Jr., "has opened up dramatic new opportunities for optimizing our resources and exploring new frontiers." Representative Gore underscored the fact that, "all sectors of our society are being affected as computers permeate the home, the office, and the business environments. However, the impact of these trends on the consumer, the business community, and the government has yet to be fully comprehended."

Several activities were organized to focus on the issues surrounding the growth of information and communications technologies, as well as to illustrate some of the capabilities which these modern technologies offer society. Included in the month's program were:

- o an all-day series of (eight) workshop discussions on the critical issues in this area and the potential role of Congress in addressing them,
- o a luncheon speech by Dr. John LeGates of the Harvard University Program on Information Resources Policy entitled, "The Arenas, Players and Stakes of the Communication/Information Issue",

- o a "Technology Fair" featuring exhibitors of teleconferencing, word processing, microform, personal computing and other computer systems,
- o a panel discussion featuring several authorities in the field, and
- o a Member's dinner offering an opportunity for legislators to interact with representatives from the information community.

The following text provides an edited summary of the remarks from the March 28, 1979 panel discussion on information and communications, as well as brief highlights from the reports of the March 7, 1979 workshop discussion groups.

CONGRESSIONAL CLEARINGHOUSE ON THE FUTURE
PANEL DISCUSSION ON INFORMATION AND COMMUNICATIONS
MARCH 28, 1979

Moderator: Charles Jackson, Staff Engineer, Subcommittee on Communications, Committee on Interstate and Foreign Commerce, U.S. House of Representatives

Participants: Manley Irwin, Professor of Economics, University of New Hampshire Andrew Glass, Washington Bureau Chief, Cox Newspapers George White, Corporate Vice-Preseident for Research, Development, and Engineering, Xerox Corporation Joanne Egan, Information Manager, Air Products & Chemicals Corporation

QUESTION #1. WHAT MAJOR SOCIAL IMPACT MIGHT WE EXPECT IN THE NEXT DECADE DUE TO CHANGES IN INFORMATION AND COMMUNICATIONS TECHNOLOGY?

PANEL RESPONSES

Manley Irwin:

- I see about four major changes taking place.

1. The technology of information is spreading and broadening rather rapidly. The breadth of expertise, knowledge, and know-how is broad and, I would argue, is increasingly moving laterally -- that is, spreading into other industries.

2. The rate of change of information technology is quickening. You can see the accelleration in terms of product obsolescence. The rate of change, the rate of obsolescence is something that we are not very well prepared to live with, and yet it seems to be very much a part of our future.

3. A third development is that the number of firms getting into the telecommunications and information business is increasing and growing beyond all expectation. The information economy contains not only the telephone industry and the common carrier industry, but also the manufacturers of equipment, office products, integrated circuits, computers, software, computer peripherals, and aerospace firms, as well as chemical and petroleum suppliers. Thus, the amount of resources that are being brought to bear in terms of talent, in terms of money, in terms of capital, and in terms of investment is a major change that we can expect in the future.

4. The traditional markets that have been identified and associated with the information or communications industries are quickly becoming "soft" and obsolescent. Today, the boundary lines between voice, data, video, and facsimile are rapidly disappearing, and tomorrow we will see very little difference between the markets enjoyed by regulated firms and the markets that are going to be occupied by competitive firms.

- These trends raise questions in terms of what is the role of regulation, what is the role of antitrust, what is the role of market structure, and what is the role of public policy. It suggests that a lot of our old institutions may very well be anachronisms, that the type of management required to deal with these changes will be different, and that policy people will have to be less rigorous and perhaps more flexible in terms of drawing the rules of the game.

Andrew Glass:

- I class myself as a consumer of information, and in the chain of newspapers with which I am involved in the Washington Bureau, we have recently gone through some of this rapid change described by Mr. Erwin. Specifically, the advent of terminals in the newspaper business has had two major effects:

1. There is now no need for re-keystroking any story that a reporter writes, other than for editing purposes.

2. The terminal, which has many uses, is also an excellent writing device and we find that in our staff the writing has dramatically improved. It is easier to keep track of the number of words written and it is possible to do things that were difficult or improbable before. We are now in a position to take any story that is written and make it available to any other newspaper or news organization in the country and vice versa.

- One aspect of this is the possibility, and indeed the desirability, of the electronic press release. The story would then be available within our system in some storage mode where it can be handled more flexibly instead of having to work with a piece of paper.

- It should be noted that there is a need for a truly portable computer terminal -- something with a screen -- that is not well filled at this point.

- It also makes sense for newspapers and magazines and related areas of journalism to use these terminals as research devices, thus eliminating the need for large newspaper libraries. For example, I would favor the ability to interconnect the Library of Congress' automated information retrieval system with the major news bureaus in town.

George White:

- I would like to place my remarks in the context of the GNP--or the industrial perspective in the United States. I think it is indisputable that the next major, macro, super industry in the U.S. economy and in the world economy will be the information industry in toto. The information industry enjoys greater economic privileges due to the productivity of the industry, and material privileges because it does not pollute or consume raw materials; this allows tremendous value added per dollar of capitalization. I see

nothing in the industrial perspective in this country or elsewhere that will forestall the information industry over several decades from simply becoming the world's number one industrial sector.

- First, I would like to look at why changes are occuring in the office:

  1. In the office, the sociology at the present time is also undergoing a revolution that is synergistic. Career enrichment, particularly for women's role in offices, are such that the position of classical secretary is not going to be an attractive career. A significant fraction of our labor force will look to becoming managers, administrators, and analysts who use the new information technology rather than be a human alternative to it.

  2. A second reason for change will be economic. The office is the last great pool of undercapitalized labor in the United States. In 1977 the U.S. had $53,000 worth of invested capital per worker in the agricultural industry, $31,000 per worker in the manufacturing industry, and only $2,300 per worker in the office.

  3. A third major reason for change is technology. The generalized function of composing -- all of those transactions that add value to the field of information and its context by manipulating the information -- will be done electronically, on-line. In communications technology the combination of broadcast capability and very low channel cost is going to be like nuclear bombs in the deployment of communication channel capacity. Finally, in regard to storage and file capacity, video disc technology will support storage of data for many purposes with very low access costs.

  4. As a result, paper becomes too expensive to use as an information interchange media; it becomes a personal choice for some special purposes. By and large, most systems will not interchange paper, but rather electronic representations of the information because it is cheaper and more flexible.

- Second, I would like to look at what these changes will be:

  1. The typewriter will be replaced by an electronic work station -- display-oriented with flexibility that transcends anything the typewriter can handle today.

  2. I would expect that video conferencing would be the generalized extension of today's telephone.

  3. The copier will become a terminal for electronic mail, electronic filing and retrieval, electronic composition, make-up, and manipulation.

4. Finally, two institutions -- the U.S. Postal Service and the Library of Congress -- will operate on an electronic base rather than on a paper base.

- Certain social consequences can be identified for the political and governmental processes of the United States -- as well as for the U.S. as a whole -- since the Government itself is, in fact, a collection of massive information systems.

1. The tremendous pools of people with Civil Service ratings and qualifications, the heels and wheels U.S. Postal Service, are going to face a massive threat of technological unemployment and it is not clear what national policy in that situation should be. State and local government will be under much more severe pressure. Government has been, in a personnel sense, the fastest growing component in the GNP for some time and technological unemployment is the counterpart of that $2,300 per office worker of capitalization. This is a very specific area that should be looked at.

2. In industry there will be new operating modes. It should be a countertrend against inflation and should be economically effective, but the labor displacement problem will come up again.

3. Finally, there will be new markets. There will be a boom in capitalizing instead of expending the costs that go in offices. We need a regulatory philosophy that allows us to proceed with pace to assure the United States ends up in front of the international trade race as this happens.

Joanne Egan:

- I totally subscribe to the statements that we have an incredible information proliferation because of our technological advances in composing, communications, and storage capacity. What concerns me is the social impact of these advances --what we will do with them.

- The "office of the future" is beginning to impact industry and the potentials for it. The change that is going to be required in management style and technique, and in capacity, is incredible. It's going to have an impact on our work force and a very important impact on how we do business.

- These new technologies and systems are also a very important national resource and will be a big industry. Questions arise concerning how we will sell it, use it for the future, and export it. We have to face the fact that as the country's economy becomes more service-oriented, the products that we manufacture will not necessarily be hard products.

- We have to know how information is thought through, how it needs to be retrieved, and what the intellectual bases are for finding facts. Problems of intellectual retrieval will have to be solved on a personal and on a management basis, in addition to the technological aspects.

- Competitive industry is going to look for the new technological developments to make their products cheaper and to get a larger market share.

- The impact of this quickly changing technology on a personal level will be extensive and will require considerable analysis in a variety of areas.

1. As persons we all will applaud the revolution in communications and information as new devices for health care, entertainment, and home management become less expensive and more widely available.

2. Individuals have begun to accept change as a rule of life, and it happens more quickly each day.

3. We have to understand what we think will be our use of these technologies for our own moral selves, for our own fabric of society -- to know as a consumer what we want to do with them.

4. The biggest displacement problem we will have has to do with the displacement of persons as we shift into a very sophisticated technological environment.

5. We will have a larger and larger gap between skilled and unskilled persons and we will have to face the issue of how to deal with those people who cannot handle our highly technological modes of operation.

GENERAL COMMENTARY

Andrew Glass:

- At Cox, we think of ourselves as being in the information business, not in the newspaper business, and it may not be long before printing a newspaper on paper and trying to get it through a downtown area for delivery to homes and selling points by truck will be an extremely inefficient and expensive, time-consuming way of doing business.

- I see three devices as being crucial in our change to new procedures for disseminating news information. Putting all three together, it is easy to see how people could not only get their newspaper at home through the the television screen, but also store it for viewing at a convenient time.

1. One is the television set which is a ready-made information screen.

2. Second is the telephone which is, particularly when digitized, an excellent computer terminal.

3. Finally, there is the video tape recorder.

- All of this suggests that if these systems come on-line in the decades to come, Federal regulation will decrease rather than increase since this type of opening up of the communications channels to an infinite number takes away the very reason for which broadcast regulation was initially instituted.

- I think that the meetings that are planned for Geneva [World Administrative Radio Conference] are going to strictly circumscribe the ability of home television sets to pick up foreign TV broadcasts due to fear that that kind of potent direct mail, if you will, is too much for governments to cope with.

Manley Irwin:

- I have a couple of examples that I think augment Mr. White's observations.

1. In 1972, satellite cost per circuit per month was $22,800. In the 1980's the cost is expected to approach $30.

2. In 1960, a medium-size computer cost $30,000 -- today the price is below $4,000.

3. In 1974, one mega-bite memory cost $32,000. Last year one mega-bite cost about $1.00; in the 1980's the cost is projected to be $.10.

4. Of the 25,000 possible applications of the microprocessor, experts argue that only 10% of that potential has been tapped.

5. In 1970, a desk calculator cost $30,000; comparable equipment today costs $5.00. Integrated circuit costs have dropped 10,000 times in the past 15 years.

6. A child can carry in a brown bag a glass fiber cable with more message carrying capacity that that of the maximum amount of copper cable that can be carried on a truck without causing the road to cave in.

7. A minicomputer in 1970 cost $10,000, in 1980 it will be $100 and in the 1990's $1.10.

8. By 1986 the numer of electronic functions incorporated into a wide range of products each year can be expected to be 100 times greater than today.

- Today, there are government regulations on a number of elements of the information technology industry. For example, there are regulations on:

1. computer terminals and on computer software,
2. remote data and response systems,
3. electronic funds transfer,
4. brokerage services with a profit mark-up,
5. computer storage, buffering and program storage,
6. minicomputers utilized for packet switching and transmission, and
7. data processing and computer message switching services.

- There is proposed government regulation on cable TV linking banks and terminals, and the Postal Service may find itself beholden to the Federal Communications Commission because it is in the communications business; not in the mail business.

- I therefore see a juxtaposition between the promise of the technology of information and a government policy that seems to want to embrace it for whatever public end.

Robert Chartrand, Congressional Research Service, Library of Congress:

- There has been a remarkable involvement and commitment on the part of the Congress in trying to remedy some of the situations which the Members perceived to be critical -- not only today, but in the forseeable future.

- Perhaps the panelists should address whether or not the first initiatives by Congress, for example, the creation of clearinghouses for various kinds of specific information, is the proper first step, or whether we are going to be in danger of loading a system without the capability of people to consume these data and know how to work with them.

Andrew Glass:

- All of you recall the early resistance to even the most rudimentary forms of computerization of congressional functions, and I believe the barriers were broken for two reasons:

1. The general wave of reform which swept through Congress in the aftermath of the Watergate period and the reassertion of congressional authority;

2. The feeling on the part of congressional leaders that unless something was done, they too might drown with their less informed colleagues in government.

- Still, there's a feeling around here that the closer you play it to your vest, the more you have in your vest, and I think that Congress is going to be nominally reluctant to be a leader in information transfer, not because they don't have the money, but because they don't have the will as an organization to set the pace.

William Wells, Staff Director, Subcommitte on Science, Research and Technology, U.S. House of Representatives:

- I would like to make the point that Congress's attitude is shifting radically with the influx of a large number of younger and newer Members.

- With the great fragmentation of power among the subcommittee chairmen, the clustering of issues related to the information industry does not receive attention from a broad perspective.

- Congress may not be the appropriate place to deal with the wide scope of issues and perhaps a commission would be a useful vehicle for trying to pull together all these disparate strands concerning broad technologies and the structure of industry.

Dennis Little, Congressional Research Service, Library of Congress:

- I'm wondering in an information rich society what happens to the people who are not in the system initiallly and therefore are information poor.

Joanne Egan:

- We can address the question possibly easier with respect to the United States and where we can develop remedial programs to bring people into the information community, to teach them how to use the tools that we have, and to teach them how to think in the framework that they need to be part of.

- With respect to the underdeveloped world, there is the question of exporting our information expertise as an actual product and being able to be reimbursed for it so that we can sell to the developing countries this resource to be used by them in becoming information rich.

Rick Rutherford, Congressional Clearinghouse on the Future:

- It seems to me that minorities in this country might just as easily qualify as an underdeveloped country for receiving "information aid".

- Persons in the information and communications industries have to deal with how to market the technology, the product, to consumers, and the Congress in its decisionmaking capacity. We need to do what is necessary to foster some of the excitement and lessen some of the intimidation of the information revolution.

George White:

- If you were to ask the question, "What is the best electronics systems house in the world, you would get either one of two answers, either AT & T or IBM -- it would depend completely on your criteria. Both of them are

exceedingly competent systems houses, but if you ask a marketing executive in IBM what can be done with their system, he will say something about accounts receivable, inventory control, production management, booking and billings. If you ask an AT & T marketing executive the same thing, he will respond, "Anything you want."

- Part of the charm for the users of information systems and part of the challenge for the industrialists is to make sure that we come up with adaptive, personalized, friendly systems that will do whatever you want, rather than ones that require master's degrees to energize and exercise them.

Paul Zurkowski, President, Information Industries Association:

- If we are going through essentially a neo-renaissance, it is because we have the ability to deal with the information equivalent of every event and to manipulate that information. That provides a whole new level of human capabilities, an extension of man.

- The most important thing that I think is likely to come of the logical extension of treating information as a national resource is a whole new foreign policy debate as to whether it should be given away, and whether that natural resource can continue to be the principal link in our foreign policy.

QUESTION #2: WHAT IS THE SINGLE MOST IMPORTANT ACTION, FROM THE POINT OF VIEW OF THE MEMBERS OF THE PANEL, THAT THE CONGRESS CAN TAKE IN THE NEXT FOUR YEARS TO DEAL WITH THE IMPACTS OF THESE CHANGING TECHNOLOGIES?

PANEL RESPONSES

Manley Irwin:

- The single most important action Congress can take is to get out of the way. I'll stop right there.

Andrew Glass:

- We sit on top of a mountain of legislation which needs to be diffused. I think we need to see that regulation in the traditional view makes less and less sense when unregulated and traditionally regulated segments of the information industry become, in effect, seamless webs which cannot, for practical purposes, be pulled apart without being rendered meaningless or inoperative.

- Therefore, I think we have to have a whole new regulation philosophy which goes back to the basic tenets of the anti-trust act, as enacted 80 years ago, to prevent restraint of trade, and to prevent monopoly. Those two tenets being met, I think we ought to open the throttle.

- We ought to think about the continuing problem in American society of minorities, the underclassed, the have-nots and what government can do in its way to bring them into the system.

George White:

- As a result of the large number of people in government employment whose previous training will become largely obsolete, I think the governments -- plural because more than the Federal government is involved -- need to be aggressively sponsoring career retraining and redirection activities of a major sort.

- I do not know of a single department of the Federal government that really is not in the information business. The product of government is either manipulation or dissemination or ingestion of information and government is going to be the portion of our national economy most directly and immediately affected by this revolution.

- The anti-trust policy is obsolescent. The objectives of the anti-trust laws need to be enshrined in a modern vehicle. They need to be redrafted completely. I say that completely neutrally. The Patent Act is almost irrelevant as well as indicated in a recent court case where the judge said we have to be very careful how we apply the details of subsequent legislative actions when we finally consider the very motivation for innovation itself.

- There is going to have to be a tremendous amount of well stimulated and well rewarded innovation for some decades to come to encompass this revolution and to make sure that it is a principal national asset of the United States in contrast to other industrial powers.

Joanne Egan:

- It boils down to information control and proper retrieval and the means for accomplishing that.

- I think from the Federal government's point of view, there has to be some kind of a focal point for systematic consideration of both national policy with respect to both information and communication, and a focal point for the issues and the resolution of them.

- It may mean realignment of Federal agencies to manage information differently; it may mean that we have to reclarify roles. What we want to do is to foster our telecommunications, our communications, and electronics industries to protect the competition and to protect innovation. As one of our most important national resources and in consideration of the normal free enterprise system, we have to protect the natural market place incentives.

Manley Irwin:

- I was being overly terse before and hoping to attract debate, but if we are about to enter a capital investment that will change our lives and hold out all kinds of benefits, services, and promises, then the first thing that ought to be done is to abolish the capital gains tax. The people who are on the leading edge of this are the risk taking people who are being crushed and anesthetized because they are different.

- By getting out of the way, I mean to cut the tax laws to let innovation take place, to let productivity take place, to let the market make some decisions to employ people and let them reach their potential.

- Do not take these obsolete institutions of the nineteenth century -- the patent laws, existing markets, anti-trust laws, current regulations -- and roll them into the future just because we are nostalgic.

Andrew Glass:

- The question of privacy has already come up in another context, but we have to be very careful that the new technology not be used in some Orwellian sense as a tool for control by the state.

George White:

- As a recent participant is a panel of the Department of Commerce's Domestic Policy Review of Industrial Innovation I was shocked to find the feeling that government, as an institution, is so prone to failure that no government is better than correct government.

- There are cases, such as in Japan, where beneficial government action has been a tremendous force. I believe that government should and can do that, and I believe that we have to support them in their efforts to catch up with the wave of the future as well as industries.

GENERAL COMMENTARY

Steven Doyle, Office of Technology Assessment:

- I think from the perspective of the Congress, if we look at the telecommunication and information systems as they exist in the world and in this country, what we see is not just a technological imperative in these areas, but a technological imperative impeded.

- To the extent that the imperative is impeded, it is impeded out of fear, out of lack of understanding, and out of traditional economic constraints and traditional economic mechanisms.

- When one discusses what the issues are in this field essentially two lists emerge:

1. One based on fear, misunderstanding, distrust, and traditional economic approaches.

2. The other based on the promise, the prospect, the hope, and the excitement of the technology.

- The role of the Congress has to be to minimize the impact of the first list of issues and to maximize the second list.

- There are levels of fear and concerns which have to be dispelled through education and Congress can provide the mechanisms to do that through hearings and studies:

1. What is lacking is the neo-renaissance man and the training process to create him?

2. Congress needs to look not only at the education of the public generally, but also at how well we are educating ourselves to manage these capabilities.

Andrew Glass:

- One of the implications of the growth of information technology is that people will have more choices -- that with the help of a computer people will have an infinite amount of choices.

1. Along with these choices will also come losers.

2. As an example, the networks are either going to go the way of the dinosaurs (in which case they are not going to go without a loud fight) or Congress is going to hear a lot from the networks asking for a "piece of the action" in the new information environment which is developing.

William Wells:

- I think there is going to be debate in Congress on these issues and it will be imprudent to think that the political process is not going to have some negative impacts on what happens. However, it is too important to the future of us all to leave these decisions to any one sector of society.

Richard Murphy, National Food Processors Association:

- In terms of institutional change in Congress, I think there are a couple of things that have got to be done, although I am not very sanguine that they will be:

1. One is to realign the structure of congressional committees so they can deal more comprehensively with some of the major public policy issues.

2. The other is that Congress has overloaded its legislative circuits by trying to oversee and superintend what the executive branch does. The number of annual authorization bills combined with the budget actions tie up Congress in so many issues that it is not free to stand back and take a look at some of the long range problems such as the impact of information technology.

Curran Tiffany, American Telephone and Telegraph Corporation

- If we try to deregulate some markets where deregulation seems reasonable, such as intercity communications, where do we draw the boundaries between deregulation and continued regulation?

- In a scheme where there are multiple networks messages flowing which we want to keep going, how do we insure proper connectivity of that network and who will be responsible for managing that network?

Manley Irwin:

- I will state it my way -- is there a natural monopoly? What I suggest is that every two years somebody evaluate what part of the natural monopoly has melted away. Or another simpler solution is to let the market make that decision and abolish the public utility commissions whose principles need reevaluation.

- The new natural monopoly is called privacy. This is the new vehicle to have regulation and sanction and due process.

- The issue of interconnectivity seems to be one where the competitors with inter-city services are concerned about one competitor having privileged access to connections and the other competitors not.

George White:

- I would like to speak in support of some of the national interest that has been handled very well by AT & T. People tend to lose sight of the fact that the reason we have this revolution, in many degrees, stems from pioneering work done by AT & T and paid for by AT & T. The institution of taxing the national phone system to support high technology has worked magnificently.

- In my opinion, the classical economics of competition is the most understandable of economic doctrines and has been overanalyzed and overdefined in terms of the questions of how industry should compete. The competitive model has no role for innovation or relatively revolutionary technology.

- The key issue regarding government standards is not the codifying of them, but the enforcing of them. The problem comes when technology cannot tell which are the dangerous or inappropriate decisions for the future as we are legislating that certain standards are mandatory.

- Standardization as a service is a very good idea, but the problem with saying that one must follow exactly a certain structure is that it will freeze out as much unknown technology benefit as it will incorporate in terms of synergistic advantages.

WORKSHOP # 1
Consumer Services

Through innovations and technological advances, new low-cost computing and telecommunications capabilities are becoming available to individual consumers. The impact these devices and systems will have on the consuming public will affect their work environment and enrich the breadth and depth of the individual consumer's cultural, educational, entertainment, and recreational needs. Some of the emerging systems will make extensive use of cable television and voice and data networks for such things as telepurchasing, telemedicine, home-based education, electronic banking, teleconferencing, electronic mail, and home management.

Recommendations:

1. Congressional support staffs should provide for such educational activities as seminars, research reports, selected readings, and demonstration programs for Members and their staffs in order that Congress can be better informed about the emerging technologies.

2. The appropriate congressional committees should hold hearings in order to study Federal policies and practices for dissemination of Federal information and services, including into the home.

3. Congress should foster demonstration programs of new technologies with direct consumer participation as an input to the policymaking process.

Commentary:

1. Electronic funds transfer may be the initial information-related service that will introduce consumers to home-based digital transmission equipment and procedures.

2. It is expected that one or more large companies will decide to invest large amounts of money in operational teletext/videotext systens for in-home consumer-oriented information delivery.

3. Through the continued expansion and use of cable television, a whole range of interactive entertainment/information services suitable for consumers may be developed and transmitted to the home.

4. The impetus for the mass marketing of home computers possibly will come from the home video game industry. Acceptance and utilization of entertainment-oriented systems by the general public may cause a trend resulting in the entwining of broadcasting technology with the home computer to provide a variety of information services delivered through electronic means.

5. AT & T may enter the home information field which could impact the pace at which devices, and hence remote iinformation services, are installed in the home.

WORKSHOP #2
Sharing versus Restricting Information

A fundamental element of modern society is the continuous and complex flow of information. Whether access to that information is made freely available or whether it is restricted can have identifiable impacts on economic, social, and political activities. Society, and hence government, operates within a context of specific areas relating to information and communication policy, such as privacy, freedom of information, electronic message systems, electronic funds transfer, transborder data flow, and criminal justice information systems.

Recommendations:

1. Congress should attempt to develop legislation which provides for the gathering, dissemination, and use of data within specific guidelines and which limits the collection and indiscriminate exchange of data.

2. Congress should provide mechanisms for analyzing and assessing the effectiveness and implications of new information systems, including a consideration of both the technology and the potential ramifications of new data handling practices.

Commentary:

1. An example of a potential management/planning mechanism would be a societal impact statement similar to an environmental impact statement.

2. Other avenues for addressing access to and dissemination of information would include a Federal privacy focus and strengthening of Federal Government agencies to more effectively manage information flow.

3. Improved Hill-wide communication on topics of information policy would be beneficial to both the House and Senate.

WORKSHOP # 3
The Role of the Media

In an era where the amount of available information continues to rise, the question revolves around how the Members of Congress and their constituencies can be best informed and in what ways the media may be utilized for this purpose. The role of media is changing so rapidly that it is difficult to comprehend the impact of the information explosion. In spite of the great strides which have been made in developing techniques for disseminating information, making certain types of information more readily available remains a problem. It is important to look at economic, legislative, and social barriers to making information available in order to comprehend all aspects of the issue.

Recommendations:

1. Congress should hold informational hearings to learn how the present economic and organizational structure of our media organizations either encourage or restrain the availability of information.

2. Restrictions under the Freedom of Information Act should be loosened to increase the availability of information such as financial data maintained by the FCC on commercial broadcasting stations.

3. Information should be collected regarding the way people learn, how they respond to the three different kinds of media -- print, visual, and audio -- and which ones are most supportive in both the formal and informal learning processes.

4. Congress should utilize these hearings in developing a national information policy which would be similar to the statement of national goals established in such areas as housing and space.

Commentary:

1. It is difficult to discuss regulations or legislations without first comprehending the new technologies which are being developed at such a rapid pace.

2. Before changes to current regulations and legislation are addressed, it is important to undertand fully what rules and laws now exist.

3. A concern exists about the social effects of introducing these various technologies, particularly as they affect possible divisions between people who have access to and know how to use new technologies, and those who do not.

4. A lot of proposals exist which would make very technical, sophisticated information available to Members of Congress to enhance the decisionmaking process, but it is also important to see that this kind of information is made available to the public.

WORKSHOP #4
Intergovernmental Information Sharing: Federal-State-Local

Because of the resources available to it, the Federal Government has become the main focus for assistance to non-national public jurisdictions. At present, however, there is neither a delineated national policy nor established guidelines for intergovernmental transfer of this information. Each Federal department or agency presently operates under internally developed policies which may in turn be non-standardized and dispersed among its components and programs.

Recommendations:

1. Congress should authorize and fund pilot projects which would result in the creation of an on-line and indexed distributed network for making available working drafts of policy memoranda, policy reports, research information, and contact person lists within the Federal agencies. This network would be available to State and local governments and all Federal agencies.

2. Congress should undertake to define and assess activities which would improve the information made available to State and local decisionmaking groups, including the establishment and support of what are referred to as "broker groups," or the strengthening already existing groups. An example of such an organization is the Federal Laboratory Consortiom.

3. Congress should determine jurisdictional responsibilities for the dissemination of federally collected information in both the executive and legislative branches in order to eliminate overlap, duplication of effort, and ineffective provision of information to other Federal agencies, States, and localities. Examples would including looking into the improvement of field delivery systems, such as the Federal Regional Councils, Federal Information Centers, and Federal commissions. Congress should also explore the idea of restructuring Federal agencies to improve the delivery of information to such existing regional centers.

4. Congress should undertake some coordinated efforts to assess the impact, both explicit and implicit, of Federal laws and regulations upon the information requirements and practices of State and local governments.

Commentary:

1. Congress should be made aware of the excellent information resources available in State and local governments which may be useful to the Federal government.

2. Better coordination between the public and private sectors should be achieved so that government agencies can be made aware of available private vendor resources and the commercial sector can develop new products where a demand exists among government users.

3. Mechanisms should be developed so that when a State receives information it may be channeled selectively down to the local level.

4. Modern techniques such as word processing, microforms, and automated indexing should be utilized fully in order to facilitate intergovernmental information transfer.

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GROUP # 5
Federal Government Policies and Practices

The Federal Government faces an array of issues, concerns, and consequences as a result of the emergence of modern information and communications technologies. Questions have arisen regarding who should be the Federal Government participants-actors, where do we currently stand in the stream of advances in communications, and what basic posture should the Federal Government take in this arena. The emergence of new information and communications technologies has been accompanied by some evidence of the alienation and disenfranchisement of individuals, as well as some confusion as to the role of newly emerging information-oriented associations and industries.

Recommendations:

1. The roles, authorities, and responsibilities of existing agencies in the information and communications fields need to be clarified for the purpose of identifying and resolving overlaps, gaps, and inconsistencies among existing authorities, responsibilities, policies, and laws.

2. A central Federal focal point for the systematic consideration of national information and communications policies and issues should be established.

3. Congress should exercise more oversight in seeing that pertinent existing laws --featuring both policies and programs -- are fully implemented.

4. Congress should adopt a posture of not attempting to over-regulate the emerging information/communication industry and marketplace, but rather should encourage putting into place "natural marketplace incentives."

Commentary:

1. The structures of the information/communications industries must be better defined in terms of their components -- markets, suppliers, clients, etc.

2. Information may be viewed on the one hand as a property right and on the other as a human right; this can cause conflicts in how information is handling as an organizational resource.

3. There are both pros and cons concerning the creation of a central focal point in the Federal Government for handling information/communications issues, with some seeing this as a "premature" organizational solution to a set of problems which have not yet matured or been sufficiently identified.

4. The definition of the term "user" is changing as computers become increasingly available to the public and are applied in more sectors of society.

5. Much of the information/communications legislation was passed in an era when the dissemination of information occurred through the use of paper media or over radiowaves, while in today's environment information transfer increasingly takes place through the medium of electronic pulses.

WORKSHOP #6
Private Sector Information Activities and Services

Information activities and services in the private sector today are comprised of such things as large centralized data bases, data communications networks, and diversified inquiry retrieval capabilities. The proper role of the government in these private sector data processing activities is an issue of increasing concern in an age of growing reliance on technology-supported information systems in all sectors of society.

Recommendations:

1. Congress should assess the cost impact of complying with the reporting requirements of any new legislation to demonstrate that the benefits of providing the required information are commensurate with its costs.

2. Sunset legislation should be fully enforced to insure that information reporting requirements for individual programs are being correctly implemented.

3. The government should sponsor information programs using such mechanisms as tax relief incentives in cases where the information product ought to enter the public domain on a timely basis and be widely available.

4. Congress should hold oversight hearings on whether the implementation of the Brook's bill (P.L. 89-306) by the agencies adheres to the original intent of the legislation.

5. Congress should establish a national policy on the flow of corporate data across international boundaries.

Commentary:

1. There is a lack of retrospective accountability on data which are collected to determine they are.

2. It is important to identify significant programs which should receive public funding and to prioritize these programs on the basis of the significance of the information which is collected.

3. OMB's circular A-76 which calls for the use of contractors and external services by government agencies in certain circumstances is not being fully implemented.

4. The private sector feels that invisible trade barriers are being established between countries which can have an economic impact on multinational corporations which may be closed out of certain markets.

WORKSHOP #7
International Information Exchange

The United States has traditionally been preeminent in information generation and in information technology, but that position is currently being challenged by other advanced nations of the world and even by some countries in the so-called "second world". Many feel that it is still in the best interests of the U.S. to promote the free flow of information across international borders, but there is also a sense that the great outflow of information may be unjustified and that the U.S. is not capitalizing on this important national resource.

Recommendations:

1. A special, joint committee of Congress should hold exploratory hearings to determine the U.S. objectives and policies with regard to international information exchange, identify the proper government role in this area and indicate any required mechanisms or legislation. Included in such a hearing should be an examination of the upcoming 1979 United Nations Conference on Science and Technology for Development and the President's recent message to Congress on international communications.

2. Congress should create or designate an existing governmental or private sector center with the specific responsibility of continuously acquiring and disseminating to the U.S. community factual information about what information resources and activities exist around the world.

3. Congress should provide a dynamic forum to address this issue area on a periodic basis with participation from all sectors -- labor, industry, commerce, defense, research and development, and government (Federal-State-local).

4. Congress should request that a study be conducted to identify the sources and media by which information flows internationally including a survey of existing international agreements and treaties which affect information exchange.

5. A referral center should be established to act as the single switching point for developing countries to have access to U.S. sources of information. Conversely, a data base or referral center should be created to provide information from abroad to the U.S. community.

Commentary:

1. The activities in this area are very fragmented with little teamwork among the various sectors in the U.S. regarding international information exchange.

2. Our foreign policy is neither taking full advantage of this resource to further the U.S. foreign policy objectives nor using it to adequately service the information needs of the U.S. community.

3. The domestic and international aspects of seldom can be separated when discussing information policy issues.

4. A referral center for developing countries could also often be used effectively by the States.

5. We need to address how people are using the vast amounts of information the U.S. provides to foreign national libraries.

WORKSHOP #8
Impact of Information Technology

Information and communications technologies offer the potential, particularly through the "office of the future" and electronic networks, for major improvements in the productivity and effectiveness of the American economy. The information and communications industries are major growth industries which have had a combined positive effect on our balance of payments.

Recommendations:

1. Congress should recognize the economic value of the computer and communications industries in future legislation which is designed to improve the national economy and the U.S. position in world-wide markets.

2. Congress should explore the economic, social, and political impacts of information as a commodity in international trade.

3. Congress should review existing studies in this field with the goal of drafting legislation which would create a better environment for innovation.

4. Congress should resist attempts to legislate standards and rely on cooperative standardization efforts, technical innovations, and the forces of the marketplace to create better compatibility between systems and data bases.

5. Congress should review existing legislation and executive orders with a view to allowing or encouraging longer term procurements, which should make it easier for government agencies to acquire better, more highly integrated systems.

Commentary:

1. Increasing office productivity as a result of automation may lead to temporary unemployment and serious displacement of many office workers. However, the automated office has the potential for creating new jobs in the long run, much like the industrial revolution.

2. The concept of "information brokers" acting as an interface between information producers and users is becoming more widespread in the communications and computer industries.

3. Barriers may have to be established to protect our national proprietary rights with respect to computers and communications.

4. The question of whether most information should continue to be free such as traditional library services or whether charge mechanisms will have to be established should be addressed.

5. The issue of the impact of the new technology on the poor, the powerless, and the disenfranchised and their ability to gain access to information should be considered with a view toward developing methods for meeting this problem.

TECHNOLOGY FAIR PARTICIPANTS

Company - Organization	Booth Assignment
A.B. Dick/Systems	Booth #16
Amdahl Corporation	Booth #17
A T & T	Booth #20
Atari	Hands-on section
Burroughs Corporation	Booth #23
ComputerLand-Tysons Corner	Hands-on section
Congressional Clearinghouse on the Future/ Congressional Research Service	Information Center
Consensor	Booth #15
Control Data Corporation	Booth #24
Digital Broadcasting Corporation/ Dialcom, Inc.	Booth #5
Eastman Kodak Company	Booth #4
Electronic Information Exchange Program	Hands-on section
GTE Laboratories Inc.	Booth #11
House Information System	Booth #22
IBM - Office Products Division	Booth #7
Information Handling Services	Booth #8
Infomedia, Inc.	Booth #19
Lexitron Corporation	Booth #6
Magnavox Consumer Electronics	Booth #18
National Library Services for the Blind & Physically Handicapped	Booth #9
Radio Shack	Hands-on section
Ramtek/Domestic Information Display System	Booth #1
Sofratev-Microband	Booth #3
Teknekron-ARG	Booth #25
Telenet Communications Corporation	Booth #2
3M Business Products Sales Inc.	Booth #21
Wang Laboratories, Inc.	Booth #12
Warner Cable/QUBE	Booth #14
Wordstream	Booth #13
Xerox Corporation	Booth #10

The Congressional Clearinghouse on the Future would like to thank the following organizations for their special cooperation and participation in the "Technology Fair": American Federation of Information Processing Societies (AFIPS); American Society for Information Science (ASIS); American Telephone & Telegraph Company (AT&T); Association for Educational Data Systems (AEDS); Association of Data Processing Service Organizations, Inc. (ADAPSO); Computer and Business Equipment Manufacturer's Association (CBEMA); Computer & Communications Industry Association (CCIA); Information Industry Association (IIA); Society for Industrial and Applied Mathematics (SIAM); and United States Independent Telephone Association (USITA).

MOVIE THEATER SCHEDULE

MOVIE	TIME **
FOR THE PEOPLE (Congressional Information Service Inc.)	11:30 AM
PATHWAYS (C&P Telephone Company)	11:45
PUSHING THE LIMITS (IBM, Inc.)	12:10 PM
FATE, FIAT, OR FAIT ACCOMPLI (CCIA)	12:45
INTRODUCTION TO LASERS (Encyclopedia Britannica)	1:25
LIGHTWAVE UPDATE (Bell Laboratories)	1:45
STORED PROGRAM CONTROLLED NETWORK (Bell Laboratories)	2:00
HORIZON (Bell Laboratories)	2:15
INFORMATION HANDLING (Information Handling Services)	2:25
AMDAHL ONLINE (Amdahl Corporation)	2:45
ATTACHED RESOURCE COMPUTER SYSTEM (Datapoint, Inc.)	3:05
FOR THE PEOPLE (Congressional Information Service Inc.)	3:20
PATHWAYS (C&P Telephone)	3:35
PUSHING THE LIMITS (IBM, Inc.)	4:05
FATE, FIAT, OR FAIT ACCOMPLI (CCIA)	4:45
INTRODUCTION TO LASERS (Encyclopedia Britannica)	5:20
LIGHTWAVE UPDATE (Bell Laboratories)	5:40
INFORMATION HANDLING (Information Handling Services)	****
AMDAHL ONLINE (Amdahl Corporation)	****
ATTACHED RESOURCE COMPUTER SYSTEM (Datapoint, Inc.)	****

**Time indicated is approximate. Please check door to Movie Theater as to film being shown.

****Shown if time permits.

CHAUTAUQUAS FOR CONGRESS 1979

THE MEDIA AND THE CONGRESS:
HOW CAN THE RELATIONSHIP BE IMPROVED?

MARCH 28, 1979

DIALOGUES ON AMERICA'S FUTURE

HAYNES JOHNSON

MARY GARDINER JONES

MARTHA STUART

JACK THAYER

SENATOR MIKE GRAVEL, MODERATOR

GRAVEL: Thank you for being with us tonight for this "Dialogue on America's Future." For those of you who are new to the Clearinghouse, we hope that you will enjoy this evening's discussion and will return for further sessions. Those of us who have attended them for two years now always find them interesting, and I most definitely learn something each time I come.

We have four guests with us tonight to talk about the relationship between the Congress and the media, and we are excited about what they may have to say. Our ability to perceive depends on our ability to get hold of accurate information and this depends on accurate communication. And so this discussion is of particular interest to those of us who must rely on good information to make good decisions.

With that introduction, I would like to call on Haynes Johnson, Pulitzer Prize winning columnist for the Washington Post and commentator on PBS-TV's "Washington Week in Review."

HAYNES JOHNSON: Thank you for having me here to be a part of this exciting series. I am particularly interested in the question you are raising here because I don't believe you can separate the press from the political process. The relationship between the government and the press is much more complex than most of us realize. And it changes all of the time.

For example, the relationship between the Congress and the Press is better than the relationship between the President and the press at this particular time. It used to be the other way around - the press was too far from the government. Now, I believe it may be too close. Even now, though, we don't know each other. Our sins are not ideological. Our sin is that we don't report the Congress very well. The weakest areas of press coverage are the Congress, business and the bureaucracy. The press doesn't understand Capitol Hill. And you tend to think that the press wants a quick fix, a

sensational headline. We think you are all crooks and you all think we are on the make. Neither of these attitudes is necessarily true and both keep us separate from each other. I'd like to stop here so that we can have as much time as possible for discussion.

GRAVEL: Thank you, Haynes. You've said some things that interest me and I'm sure interest others. We'll look forward to hearing more from you in just a minute. Our next speaker is Jack Thayer. Executive Vice President of NBC Radio. He has worked in the radio field since 1942 and brings an interesting perspective to us tonight.

THAYER: Thank you, Senator. I would like to address briefly what I consider a major component in our increased and deserved interest in the whole communications field. Changes in our ideas and belief systems and the way we choose to communicate with each other are so rapid now that what was, was, what is, was, and what will be, is. We have only begun to understand this phenonema of change. And because we don't understand it, we fear each other and fear our feelings of fear.

Radio began in 1926 when NBC created the first radio network. In 1927, President Calvin Coolidge used the radio as a national medium for the first time, and the messages given to people as a result of that use changed their lives. Radio impacted the entire political environment from then on.

Your constituency is greater than your district back home. It is the world, and the synism between the media and the Congress has developed communication problems.

Each of us is more aware now that there is more similarity between us than there are differences, and radio and now television help create that awareness, and that potential.

GRAVEL: Thank you, Jack. We'll come back to you in just a moment. Martha Stuart, our next guest, is an independent video producer who speaks about the need for access to the air waves. Welcome to our group.

STUART: Thank you, Senator. I am indeed happy to be here. And you are right when you said that I am interested in having access to the air waves. As a result of that interest, I and 20 other independent producers are suing NBC, CBS, and ABC because we believe that pluralism in the use of airwaves is necessary if the viewing public is to become visually literate. There are thousands of gifted and talented people around this country who cannot get access to the airways to share their work and ideas. We believe that that situation should change if we are to move into the 21st century with help from everyone.

You, too, should have more time on the air so that your constituents will know who you are. The general public only knows about you if there is a scandal or they happen to read about you in the newspaper. And you don't know your constituents as people because you only have access to a few of them on an intimate basis. The air belongs to everyone, and air time should be given to you and to those you represent so that your people might see how you make decisions and you might understand better what decisions they feel should be made.

GRAVEL: Thank you Martha. Thank you all for being brief. This leaves more time for discussion. Mary Gardiner Jones, our final speaker is currently Vice President of Consumer Affairs at Western Union, and served for twelve years on the Federal Trade Commission. Welcome, Mary.

JONES: Thank you, Senator. I too, am delighted to be here to address this group of concerned Members of Congress. I believe that the media and the

Congress are the two institutions that the American public relies most on for facts and leadership, and so this relationship is crucial to national pride and understanding of issues.

When I was a Commissioner at the FTC, the press gave me new insights on what was going on and helped me formulate new questions. I couldn't understand the process of the FTC because I was too close to it. The press people I came in contact with were really helpful to me in that they gave me some perspective and objectivity.

I believe that you are in the same position I was in at the FTC. How do you get a handle on the issues you are suppose to handle in the Congress? I think that the press can help you know what questions to ask.

In order to understand an institution, we need to have a hands-on approach to how Congress and committees work. If we can do that, we can help make Congress a credible institution again, because the public has got to see how Congress works before it will believe that anything is going on up here. The question, then, is "How can we make our institutions more alive to the people?" I would like to discuss that with you as we proceed.

GRAVEL: Thank you, Mary. Haynes, you want to respond to that question?

JOHNSON: Yes, Mike. Most political reporting is archaic. It is like a baseball game, and it provides no sense of the feelings of Congresspeople or how Congress works. And it does this because the press doesn't understand the Congress.

The press doesn't tell what is happening. The press is very pompous. I've seen that change since I've been in Washington. Presidents come and go, but we are still here. And as a result of poor reporting, people are

not voting. People are full of info that doesn't help them make decisions, and so nobody votes anymore.

MEMBER OF CONGRESS: I was appalled by how the press covered the first day of TV coverage from the House. It was as though the press didn't want to tell the people the truth about how the Congress works. We can't be on the Floor all day. Don't people understand that we have committee meetings and caucus meetings and constituent meetings all day everyday in addition to Floor debates and votes?

There seemed to be no sense, during that reporting, of how we operate up here, and so I completely agree with you, Mr. Johnson, when you say the press doesn't understand the Congress.

MEMBER OF CONGRESS: Mike I'd like to address a comment to each speaker. Mr. Johnson, if we become friendly with you or candid, you will say that we are playing up to you. If we are honest with you, you will tear us apart. There is nothing to stop you from doing either one. We are rewriting the Communications Act of 1934, and if we can get passage on that bill, we may change this situation, but for now, we live at your sufferance, and most of us find that very frustrating. We come to be reelected and to do a good job. 98% of the people in your profession, come in here and hear what they want to hear and write what they please. It is really extraordinary.

Mr. Thayer, maybe radio is the hope of a world constituency, but television certainly isn't. TV programming takes the low road and not the high, and the first amendment prevents us from saying to you "Give us this or give us that." What we have on the other hand, are the Fred Silverman's of the radio and TV businesses.

Ms. Stuart, it is not possible for us to say human. It is not possible for us to speak out, or be candid. Those who have, have had extraordinary relationships with the press.

And finally, Ms. Jones, your comment that the press took you seriously and helped you ask the right questions is remarkable in itself.

STUART: The press should be the connection between you and the people. You fear that you won't be reported fairly, and so we all play games of lack of information instead of giving information.

THAYER: PBS gets 4% share of the viewing of listening audience. People just don't watch that kind of programming.

MARKS: Well, Mr. Thayer, Members of Congress have a responsibility to those we represent, and for me, that includes a responsibility for leadership in which I choose and high road.

MEMBER OF CONGRESS: I would like to ask you all to address the impacts of coming communications and information technology that was discussed in this afternoon's panel. The press is the spearhead of the coming revolution, and television will be radically impacted by cable and satellite capabilities. Television networks will not only exist in three headquarters, but will be scattered throughout the globe. All of these changes make the regulatory process obsolete. In what ways will all institutions be impacted by this new technology?

JOHNSON: I still believe that people's ability to understand an issue is the important part of the problem. More than technology is at stake. In fact, technology only makes it more complicated.

JONES: I would disagree. The technology is important in this perception. Today's technology, because of its limitations, forces the networks to wrap

a product for the average citizen. News broadcasts are designed for the average citizen. Basically, most media/information is directed to only 30% of the population.

New technology will enable us to feed a multiple network of different interest groups which can be brought together into one market.

This still won't change Members' of Congress perceptions of how you are reported, but if you have larger audiences available to you, it may change what you say and how you say it. You will be able to reach different groups through the use of some of this technology, and in this way the technology will impact your message.

MEMBER OF CONGRESS: How will we feel the impact of cable TV and satellite, direct mail, and other electronic communications in our campaigns?

THAYER: In lots of ways. The networks will probably be all news shows. Videodisks, taperecorders, digital recordings will enable you to choose your programming from a variety of sources other than the networks. Telephone talk shows will eliminate barriers that you may feel today, and video conferencing will eliminate some travel for you to and from the district.

MEMBER OF CONGRESS: Members of Congress haven't digested the last technology. We are just now getting television, and the Senate hasn't gotten it yet. The press has to be the broker for us. I am apprehensive about Members having a direct pipeline to the people. The relative power of the press has changed dramatically with electronic media. It has made participatory democracy possible and people want it.

NPR has just put the Panama Canal Treaty debates on the radio, and during those proceedings, it got to be first in the ratings. We need to broadcast debates; people need to hear us grapple with these issues.

THAYER: But we only use short news now because we can't prove the effectiveness of longer coverage. That effectiveness just hasn't proved meaningful yet.

MEMBER OF CONGRESS: I was sorry that the Congress refused to give the networks access to our television coverage. I think the networks should be covering our proceedings. They won't use the material that we tape until they get the real picture, and they won't get the real picture as long as the cameras are just showing part of Floor action.

JONES: I still think that consumers need a broader base to choose from. Satellite and cable technologies are on the edge of this issue, and will make it possible for us to have access to vast new sources of information. On what basis do we want information given to US citizens? We need computer utilities and federal money to put broad access into place right now, and that broader access would mean higher quality of information through discussions of the important issues facing us. We can't leave this to private industry. It must be developed with them and the government.

MEMBER OF CONGRESS: What is your feeling, Mr. Johnson, about the way the media covers presidential campaigns? Already we have people running for president, yet the real people running for that office are not really known by the public. People still say that they don't understand Jimmy Carter.

JOHNSON: We have created a monster with these primaries. We are literally choking on information. There are 26 primaries now and candidates have to start running two years in advance. The system is clogged and people are tuning out. The problem is how we use the media. I think that the most important question facing us is "Who decides in a democratic society." The person who controls has the power. Someone decides what is being used in the media. Who is doing the deciding?

JONES: We can say that whoever uses is the one who decides.

STUART: I don't know how you are making decisions in Congress anymore. I wonder how the media could be used to help us see decisions being made.

MEMBER OF CONGRESS: I am a member of Congress from California, and I used to work for NBC, and I can't get on any of the major networks. In California, we live in a tough media market, and it is important for us to get on television so that we can talk about issues with our constituents. But I can't get on the air in a state where there are lots of newsmakers and a limited number of networks.

GRAVEL: We have time for only one more comment.

MEMBER OF CONGRESS: I am a new member of Congress and I have three things to say. (1) I don't understand the Congress either. It's a very complicated institution that obviously needs reform. (2) I don't want to get on television because I am afraid it will be used negatively. I don't trust the news media to be fair with me. (3) I come from Iowa which has the highest literacy rate in the country. We just had an important Senatorial election in our state. Just before the election, each candidate had a name identification of 95% with the public, yet a week after the election, less than 60% could say what Roger Jepsen did. My question in the form of a comment as a result of these three observations is that I wonder what a further proliferation of the media and of information will really mean. It would seem that we can't really deal with what we already have.

GRAVEL: Thank you for that fine concluding remark, Congressman. We have raised more questions here tonight that we can answer, but hopefully we have stimulated some thinking about the relationship between the media and the Congress and have begun, therefore, to reevaluate our own values and attitudes regarding that relationship.